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Skylab imagery of Central American volcanoes

August 1974

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Summary Status

Most of the current period was unproductive, awaiting receipt of data. Compilation of passes was made, and maps assembled. A special ground truth survey was made to investigate the Izalco volcano thermal anomaly.

Recommendations

Given the problems of scheduling predawn passes over the test area, we requested that some active volcanic region be imaged.

Expected Accomplishments and Summary Outlook

Upon receipt of all imagery we plan to reevaluate our objectives since predawn thermal imagery over our test area (our primary interest) now appears unlikely. Also, due to late receipt of imagery we probably will have to extend the deadline of the project.

Significant Results

The size and intensity of the Izalco volcano thermal anomaly, which were increasing between July and December 1973, have not increased in the January - April 1974 period. Volcanic activity at Pacaya volcano, Guatemala was very prominent during the quarter. Details of the activity are being collected and assembled.

Travel Summary

The investigators met in Hanover, N.H. in early April. A special trip to El Salvador to investigate Izalco volcano was made in late April.

Addendum

Izalco thermal anomaly check, April 1974

Report Central America Trip
R. W. Birnie 25 April-29 April, 1974

Thursday, April 25

leave late night for Guatemala

Friday, April 26

arrive Guatemala City at noon

pick up Skippy and drive to San Salvador

arrive Casa Clark about 8:00 PM

Saturday, April, 27

conduct gravity survey of Izalco (Data enclosed)

summit crater examined for new cracks and any other
changes - nothing noted

set up PRT-5 at Cerro Verde Hotel about 5:30 PM for
mountain cooling observations, but failed due to
clouds.

Sunday, April 28

early morning PRT survey of Izalco from Cerro Verde -
pattern same as Nov. '73 and Feb. '74 study - i.e.
anomaly still there but not increased. Anomaly most
certainly located in low temperature fumarole zone
to right of trail just before arriving at summit.
Close inspection of this area (photos also taken)
showed no change from Feb. '74.

fumarole condensates collected from Y and W fumaroles.
They were very dry - i.e. 1.5 hrs. required to get
very small sample.

thermocouple broken so unable to get fumarole or surface
temperature in crater.

return Guatemala City in evening

Monday, April 29

return Boston

bring recent ash sample from Pacaya plus Izalco fumarole L
condensate from Sam.